Claims

1. Modular electrical switch containing at least one switching element (8) intended to be fastened by soldering onto a printed circuit board (9) to realize a specific electrical function and a housing (4) with control rocker (2) for the switching element (8), characterized in that the housing (4) is detachably fixed relative to the switching element (8) and can be replaced by a different control rocker housing (4) detachably fixed relative to the switching element (8) to change the electrical function of the switching element or its mode of operation.

2. Switch according to Claim 1, characterized in that it includes a second switching element (8) attached to the printed circuit board (9) by soldering to realize a determined electrical function identical to or different from the first switching element, and wherein the housing (4) with the control rocker (2), fixed detachably relative to the two switching elements of the first switching element (8), can be replaced by a different control rocker housing (4) to control the second switching element (8) also, in order to change its electrical function or its mode of operation with regard to the previous control housing (4), or in order to have it achieve its electrical function that was inhibited in the previous control housing (4).

3. Switch according to Claim 1 or 2, characterized in that each control rocker housing (4) includes two elastic lateral locking feet (13) which can engage elastically into two respective openings (5) in the printed circuit board (9) to fix the housing (4) detachably relative to each switching element (8) that is accommodated in this housing.

4. Switch according to Claim 3, characterized in that each housing (4) comprises at least one built-in optical waveguide (18), such as an optical fiber, allowing light from a light source, such as a light-emitting diode soldered to the printed circuit board (9), to be backscattered in the control rocker housing.

5. Switch according to one of the previous claims, characterized in that each control rocker (2) is made of a plastic material and includes at least one symbol (2a) visible from the outside, such as a pictogram, realized by the so-called in-mold technique.

6. Electrical switching device with several electrical switches (1) assembled, in particular, on a plate (3) of a vehicle instrument panel, such as a truck, boat, industrial machinery, forklift, or the like, each switch (1) comprising at least one switching element (8) fastened by soldering to a printed circuit board (9) attached to the plate (3) behind and essentially parallel to it, and a housing (4), with control rocker (2) of the switching element (8), penetrating the instrument panel plate (3) with the rocker (2) accessible from the outside, characterized in that each housing (4) is detachably fixed to the printed circuit board (9) in an interchangeable way while enclosing within it the switching element (8), and can be replaced by a different control housing (4) that permits controlling the switching element (8) differently.

7. Device according to Claim 6, characterized in that it includes two switching elements (8) which can be associated with each control rocker housing (4), and where at least one of the switching elements or the two switching elements can be controlled according to the type of control housing (4) chosen to realize a particular switching method or a specific electrical function of the controlled switching element (8).

8. Device according to Claim 6 or 7, characterized in that each housing (4) includes a shell (6), permitting covering the opening (5) in the plate (3) through which the housing (4) is assembled and being adjustable and securable in position relative to the housing (4), which is detachably fastened to the printed circuit board (9), by two side prongs (20) of the housing (4) respectively engaging elastically with the side notches (19) of the shell (6).

9. Device according to one of Claims 6-8, characterized in that each control housing (4) is detachably fastened to the printed circuit board (9) by two elastic lateral locking feet (13) integral with the housing (4) and capable of being engaged by clicking into two respective openings (14) in the printed circuit board (9).